

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of)
)
Shunpei YAMAZAKI et al.)
)
Serial No.: 10/705,604)
)
Filed: November 10, 2003)
)
For: Manufacturing Method Of)
Emitting Device)
)
Art Unit: 1792)
)
Examiner: James Lin)
)
Confirmation No.: 6065)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REASONS FOR REVIEW OF FINAL REJECTION

Dear Sir:

In support of the Notice of Appeal and Pre-Appeal Brief Request For Review filed herewith,
Applicants are requesting review for the following reasons:

Applicants submit that there is clear error in the Examiner's rejections in the Final Rejection
of August 19, 2008.

In the Final Rejection, the Examiner has the following rejections under 35 U.S.C. §103:

- 1) Claims 1-3, 6-7 and 22-28 are rejected as being unpatentable over Kimura et al. (U.S. 2002/0075422) in view of Kawase (GB 2,360,489) and McCormick (U.S. 6,593,690).
- 2) Claims 1-3, 6-7 and 22-28 are rejected as being unpatentable over Miyazawa (U.S. 2003/0166311) in view of Kimura.

- 3) Claims 10-11 and 22-28 are rejected as being unpatentable over Kimura in view of Kawase and McCormick and further in view of Miyashita et al. (U.S. 2002/0155215).
- 4) Claims 10-11 and 22-28 are rejected as being unpatentable over Miyazawa in view of Kimura and further in view of Miyahashi.
- 5) Claims 16-17 and 22-28 are rejected as being unpatentable over Kimura in view of Kawase and McCormick and further in view of Yamazaki (U.S. 2002/0164416).
- 6) Claims 16-17 and 22-28 are rejected as being unpatentable over Miyazawa in view of Kimura and further in view of Yamazaki.
- 7) Claims 14-15 are rejected as being unpatentable over Kimura in view of Kawase, McCormick and Miyashita and further in view of Konuma et al. (US 2002/0030443).
- 8) Claims 14-15 are rejected as being unpatentable over Miyazawa in view of Kimura and Miyashita and further in view of Konuma.
- 9) Claims 20-21 are rejected as being unpatentable over Kimura in view of Kawase, McCormick and Yamazaki and further in view of Konuma.
- 10) Claims 20-21 are rejected as being unpatentable over Miyazawa in view of Kimura and Yamazaki and further in view of Konuma.

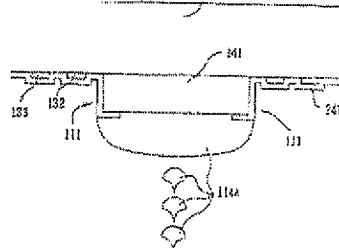
As explained below, there is clear error in these rejections, and the rejections should be withdrawn.

Rejection Nos. 1, 3, 5, 7 and 9

More specifically, in each of these rejections above, the Examiner rejects the claims over Kimura in view of Kawase and McCormick (and additional tertiary references in some of the rejections). In the rejections, the Examiner contends that Kimura teaches a method of making an EL display device, and that in the embodiment of Fig. 8, an EL solution 114A is ejected towards the pixel electrode 141, wherein the pixel electrode is turned to face downward [0170]. The Examiner admits that Kimura “does not explicitly teach ejecting under a pressure lower than atmosphere pressure.” The Examiner then cites Kawase and contends that Kawase teaches that a flow of gas

across the substrate and heating of the substrate during deposition can increase the drying speed in order to form a uniform EL layer, but does not explicitly teach the use of a vacuum.”

[FIG. 8 of Kimura]



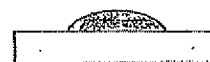
[FIG. 8b and 9a-9b of Kawase]

Fig.8b.



Fig.9a.

Without Gas Flow



With Gas Flow

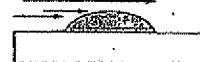


Fig.9b.



The Examiner then cites McCormick and contends that McCormick teaches “applying a vacuum is an operable equivalent of applying heat in the method of increasing drying speed (col. 6, lines 47-51). The teachings of McCormick would have presented a recognition of equivalency in the prior art and would have presented strong evidence of obviousness in substituting one method for the other in a process of evaporating a solvent. The substitution of equivalents requires no express suggestion.”

Applicants respectfully disagree with this argument and respectfully submit that even if each of these references were combined (which Applicants do not admit is proper), the combination still does not disclose or suggest the claimed invention. Hence, there is clear error.

In particular, McCormick at col. 6, lines 47-51 states “[a]fter the buffer layer has been applied, it should be dried to remove the coating solvent (e.g., water). The buffer layer may be dried by exposure to ambient conditions. Faster drying times may be achieved by, e.g. applying heat, applying inert gas, or applying a vacuum” (emphasis added). Hence, the drying occurs after the buffer layer has been applied. Therefore, even if the buffer layer is regarded as an EL layer (which Applicants do not admit), the EL solution is dried by heating or applying a vacuum after the EL solution has been applied.

In contrast, the claimed invention recites ejecting a solution under a pressure, at for example,

lower than atmosphere pressure. As explained, for example, in Embodiment Mode 1 in the specification of the present application, with this claimed feature, the method of the present invention can achieve that the ejected solution travels while volatizing the solvent under the reduced pressure. This claimed feature and effect are not disclosed or suggested in Kimura, Kawase, and/or McCormick.

Therefore, there has been no showing of all the claimed elements in the rejected claims. This is clear error.

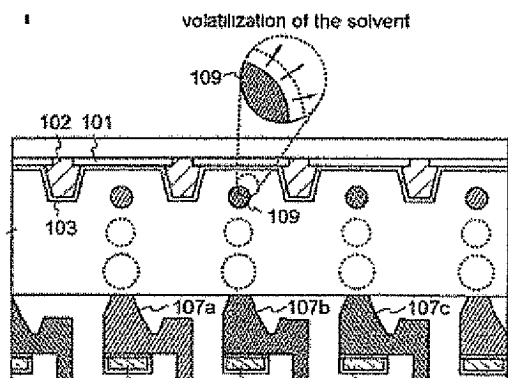
Accordingly, as there is clear error in §103 Rejection Nos. 1, 3, 5, 7 and 9, these rejections should be reversed.

§103 Rejection Nos 2, 4, 6, 8 and 10

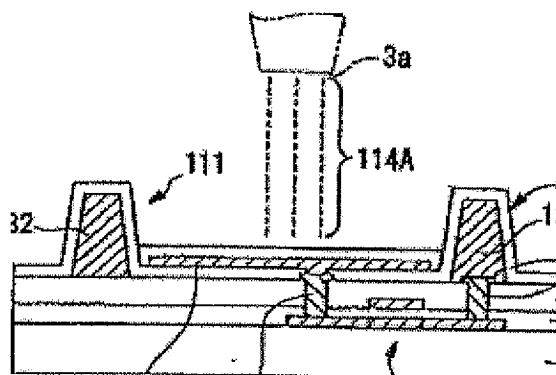
In the §103 Rejection Nos. 2, 4, 6, 8 and 10 above, the Examiner rejects the claims over Miyazawa in view of Kimura (and additional tertiary references in some of the rejections). These rejections are also respectfully traversed.

As explained above, the claims recite the feature of ejecting a solution under a pressure, at for example, lower than atmosphere pressure. This feature and the effect of it are not disclosed or suggested in the cited references. This difference is clearly shown in comparing Fig. 1A of the present application wherein, as explained above, the claimed feature of ejecting a solution under a pressure, at for example, lower than atmosphere pressure can achieve that the ejected solution travels while volatizing the solvent under the reduced pressure which is not disclosed in Fig. 5A of Miyazawa.

[FIG. 1A of the present invention]



[FIG. 5A of Miyazawa]



Therefore, there has been no showing of all the claimed elements in the rejected claims. This is clear error.

Accordingly, as there is clear error in §103 Rejection Nos. 2, 4, 6, 8 and 10, these rejections should be reversed.

Conclusion

Accordingly, Applicant respectfully requests review of the §103 rejections, reversal of the §103 rejections, and allowance of the claims.

If any fee is due for this request, please charge our deposit account 50/1039.

Favorable consideration is earnestly solicited.

Date: December 16, 2008

Respectfully submitted,

/Mark J. Murphy/

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